

WHAT IS CLAIMED IS:

1. A semiconductor device, comprising a transistor and surge absorption element formed on the same substrate and connected in parallel, wherein said surge absorption element
5 has a resistance during breakdown operation that is smaller than a resistance of the surge absorption element during breakdown operation of said transistor, and wherein a secondary breakdown current of said surge absorption element is larger than a secondary breakdown current of said transistor.

10 2. The semiconductor device according to claim 1, wherein the secondary breakdown voltage of said surge absorption element is smaller than the secondary breakdown voltage of said transistor.

15 3. The semiconductor device according to claim 1, wherein the breakdown voltage of said surge absorption element is smaller than the breakdown voltage of said transistor.

20 4. The semiconductor device according to claim 3, wherein the secondary breakdown voltage of said surge absorption element is smaller than the secondary breakdown voltage of said transistor.

5. The semiconductor device according to claim 1, wherein the secondary breakdown current of said surge absorption element is larger than a surge current flowing to said surge absorption element.

6. The semiconductor device according to claim 1, characterized in that said transistor is a lateral MOSFET and said diode is a Zener diode.

7. A semiconductor device constituted by a plurality of
5 transistors, comprising:

an input terminal;

an output terminal;

a voltage source terminal; and

a surge absorption element is provided in at least one of
10 between the input terminal and voltage source terminal, between the output terminal and voltage source terminal, and between the voltage source terminal and ground;

wherein the surge absorption element and each transistor satisfies at least one of the following relationships:

15 the surge absorption element has a resistance during breakdown operation that is smaller than a resistance of the surge absorption element during breakdown operation of the transistor,

a secondary breakdown current of the surge
20 absorption element is larger than a secondary breakdown current of the transistor,

the secondary breakdown voltage of the surge absorption element is smaller than the secondary breakdown voltage of the transistor,

the breakdown voltage of the surge absorption element is smaller than the breakdown voltage of the transistor, and

5 the secondary breakdown current of the surge absorption element is larger than a surge current flowing to the surge absorption element.